



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,570	12/23/2004	Keith Edwin Curtis	3128/FBR	3433
23446 7590 12/07/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER JANAKIRAMAN, NITHYA	
			ART UNIT 2123	PAPER NUMBER
			MAIL DATE 12/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/720,570

Applicant(s)

CURTIS ET AL.

Examiner

Nithya Janakiraman

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to the application filed on 9/11/2007. Claims 1-9 are presented for examination.

#### ***Response to Arguments- Objections***

1. Applicant's arguments, see page 4, filed 9/11/2007, with respect to claims 2 and 5 have been fully considered and are persuasive. The objections of claims 2 and 5 have been withdrawn.

#### ***Response to Arguments- 35 U.S.C §103***

2. Applicant's arguments filed 9/11/2007 have been fully considered but they are not persuasive.

3. **Argument 1:** Applicant argues on page 5, lines 13-14 that Johnson makes no mention of games, casinos, or electronic gaming machines and should not be combined with Alcorn.

4. Examiner was not relying upon Johnson to teach the limitations involving gaming, casinos, or electronic gaming machines. The Alcorn invention involves a microprocessor based gaming system used in gambling casinos. Rejection maintained.

5. **Argument 2:** Applicant argues on page 5, lines 17-20 that neither Johnson nor Alcorn teaches a control apparatus for emulating EPROM media including control logic and at least one V-PROM to emulate EPROM media.

6. The control logic is provided in the form of the disk subsystem 19 of Alcorn. The V-PROM is provided in the form of the "game specific data set" (Alcorn, column 6, line

31). As defined by Applicant's specification, V-PROM is files or directories containing software and data. In this case, Alcorn's game specific data set is emulated by Johnson's EPROM emulator to create a virtual game specific data set. Thus, Alcorn as modified by Johnson teaches a control apparatus for emulating EPROM media including control logic and at least one V-PROM to emulate EPROM media.

7. **Argument 3:** Applicant argues on page 3 that neither Johnson nor Alcorn discloses a presentation program function configured to retrieve data and program entity information from the V-PROM.

8. Alcorn teaches the video subsystem 22, which is capable of displaying the selected game, which is a selected program entity from the game specific data set, or V-PROM, on a monitor (column 6, lines 54-63).

9. **Argument 4:** Applicant argues on page 6, lines 1-2 that neither Johnson nor Alcorn teaches a selection program isolating a subset of the contents of the V-PROM based on user input for at least on of execution and authentication of the subset.

10. Alcorn discloses on column 9, lines 40-44: "as a player selects a casino game for game play in the system, the authenticity of that game actually stored in the mass storage unit is automatically checked using the authentication procedure". Thus, a user selects an isolated subset (a game) to execute (play), which is then authenticated.

11. **Argument 5:** Applicant argues on page 6, lines 5-7 that neither Johnson nor Alcorn teaches at least one V-PROM resident on a non-volatile storage wherein the at least one V-PROM logically groups executable software and related data to emulate EPROM media.

12. As defined by Applicant's specification, V-PROM is files or directories containing software and data. In this case, Alcorn's game specific data set is emulated by Johnson's EPROM emulator to create a virtual game specific data set. Thus, Alcorn as modified by Johnson teaches a control apparatus for emulating EPROM media including control logic and at least one V-PROM to emulate EPROM media.

13. **Argument 6:** Applicant argues on page 6, lines 9-10 that neither Alcorn nor Johnson provides a presentation program to retrieve executable software and related data from the V-PROM.

14. Alcorn teaches the video subsystem 22, which is capable of displaying the selected game, which is a selected program entity from the game specific data set, or V-PROM, on a monitor (column 6, lines 54-63).

15. **Argument 7:** Applicant argues on page 6, lines 10-12 that neither Johnson nor Alcorn teaches isolating a subset of the contents of the V-PROM based on user input for at least one of execution and authentication of the subset.

16. Alcorn discloses on column 9, lines 40-44: "as a player selects a casino game for game play in the system, the authenticity of that game actually stored in the mass storage unit is automatically checked using the authentication procedure". Thus, a user selects an isolated subset (a game) to execute (play,) which is then authenticated.

17. **Argument 8:** Applicant argues on page 6, lines 15-17 that neither Johnson nor Alcorn teaches a V-PROM registry configured to store logical EPROM grouping information for related stored programs and data sets to be installed and executed at a gaming device.

18. As stated above, Alcorn discloses the V-PROM registry in the form of the game specific data set. The game specific data set is modified by Johnson to emulate EPROM media, which is then installed and executed on a casino game machine.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,643,086, Alcorn et al. (hereinafter Alcorn) in view of US Patent 5,003,507, Johnson, (hereinafter Johnson).

22. Alcorn discloses an electronic casino gaming system for storing a casino game authentication program (see Abstract). However, Alcorn does not disclose the emulation of erasable programmable read-only memory (EPROM).

23. The Johnson invention relates to EPROM emulators (see column 1, lines 8-29).

24. Alcorn and Johnson are analogous art because they are both related to read-only memory (ROM).

25. Therefore, it would be obvious to one having ordinary skill in the art at the time the invention was made combine the casino game authentication program with the EPROM emulator of Johnson because "this allows the EPROM to be much more versatile" and "there is need to eliminate this time consuming reprogramming during the development stages of this type of hardware" (see Johnson, column 1, lines 15-20).

Combining Alcorn and Johnson would create an emulated EPROM interface that "allows the programmers to concentrate on the programming without the worry of having to face a long reburning process for a new test. This in turn leads to a better product since it can be more thoroughly tested before the final EPROM is programmed and any bugs or faults which are found can be eliminated by further testing" (see Johnson, column 1, lines 22-29).

26. Regarding independent claim 1 (and 6), Alcorn and Johnson teach:

A control apparatus (and method) for emulating the physical characteristics of binary data stored in EPROM media for use with a digital processing device (*Johnson: column 1, lines 8-29, "eprom emulator"*), comprising a CPU, operating system, dynamic memory, input/output capability and executable software (*Alcorn: Figure 1*), including:

a. a control logic (*Alcorn: column 6, line 29, "controlled by disk subsystem 19"*);

- b. a non-volatile storage (*Alcorn: column 6, line 20, "a non-volatile RAM"*);
- c. at least one V-PROM resident on said non-volatile storage (*Alcorn: column 6, lines 31-35; the "game specific data set" serves as the file folders and directories containing software and data for the V-PROM as defined by Applicant's Specification*), said at least one V-PROM logically grouping discrete data and program entities to emulate EPROM media (*Johnson: column 1, lines 8-29, "eprom emulator"*);
- d. a communications connection between said V-PROM and said CPU (*Alcorn: column 6, lines 31-35, "Disk drive unit 18 provides storage for the game specific data set"; storage within a CPU necessarily involves communication*);
- e. a presentation program function configured to retrieve data and program entity information from said V-PROM (*Alcorn: column 6, lines 58-63; video subsystem 22 provides display capability of the various games within the 'game specific data set'- the V-PROM*);
- f. a registration program for registering authorized users of said presentation program (*Alcorn: column 9, lines 51-54; the presence of authorized users necessarily involves a registering to make the users authorized*);
- g. a reporting program for reporting authorized users and activities of said users (*Alcorn: column 8, lines 55-57, "message digest"; reporting on the game data set includes reporting on the user operating the game data set*);
- h. a security function for protection of contents of said V-PROM (*Alcorn: column 2, lines 14-41, the "authentication program" provides the security function*);
- i. a selection program for isolating a subset of said contents of said V-PROM based on user input for at least one of execution and authentication of said subset (*Alcorn: column*

9, lines 41-44; “a player selects a casino game for game play in the system, the authenticity of that game actually stored in the mass storage unit is automatically checked using the authentication procedure”; in this manner, the subset is the selected casino game of the player to be executed and authenticated);

j. a interface connection between said V-PROM and at least one external EPROM-compatible device (*Alcorn: column 6, lines 66-67 and column 7, line 1, “provides interfaces to the game mechanical devices”*).

3. Regarding claim 2, Alcorn and Johnson teach:

The control apparatus of claim 1, wherein said control logic chooses among said subset of said contents of said V-PROM for presentation to said EPROM-compatible device (*Alcorn: column 6, lines 58-63; video subsystem 22 provides display capability of the various games within the ‘game specific data set’- the V-PROM*).

27. Regarding claim 3, Alcorn and Johnson teach:

The control apparatus of claim 2, wherein said EPROM-compatible device comprises authentication capability (*Alcorn: column 2, lines 14-41, the “authentication program”*).

28. Regarding claim 4, Alcorn and Johnson teach:

The control apparatus of claim 3, wherein said authentication capability is designed for gaming activities (*Alcorn: column 6, line 5, “electronic casino gaming system”*).

29. Regarding claim 5, Alcorn and Johnson teach:

The control apparatus of claim 1, wherein said subsets of said contents of said V-PROM comprise gaming applications (*Alcorn: column 6, line 31, “game specific data set”*).

30. Regarding claim 7, Alcorn and Johnson teach:

The method of claim 6 wherein said software relates to the field of gaming (*Alcorn: column 1, line 14-22*).

31. Regarding claim 8, Alcorn and Johnson teach:

The method of claim 6 wherein said EPROM-compatible device relates to authentication activities (*Alcorn: column 6, line 18, "authentication software"*).

32. Regarding claim 9, Alcorn and Johnson teach:

The control apparatus of claim 1, further comprising a V-PROM registry configured to store logical EPROM grouping information for related stored programs and data sets to be installed and executed at a gaming device (*Alcorn: column 6, line 31, the "game specific data set" comprises the V-PROM*).

### ***Conclusion***

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

09/720,570


Art Unit: 2123

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nithya Janakiraman whose telephone number is 571-270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NJ



ZOILA CABRERA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100

11/30/07